



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

NOV 8 1999

Operations Division  
Technical Support Branch

Mr. Andrew J. Kemmerer  
Regional Director  
National Marine Fisheries Service  
Southeast Regional Office  
9721 Executive Center Drive, North  
St. Petersburg, Florida 33702-2449

Dear Mr. Kemmerer:

The U.S. Army Corps of Engineers, New Orleans District, is forwarding the Endangered Species Report for hopper dredge channel maintenance of the Calcasieu River and Pass, Louisiana, bar channel conducted during Fiscal Year (FY) 1999. This will fulfil requirements of the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The contract dredge ATCHAFALAYA was mobilized to the channel to conduct routine maintenance dredging on November 15, 1998.

This report is intended to assist your office in the continued review of hopper dredge activities in the New Orleans District, to complement FY 1995, FY 1996, FY 1997, and FY 1998 reports previously transmitted to your office, and to fulfil the reporting requirement for New Orleans District dredging in the Calcasieu bar channel with contract dredge ATCHAFALAYA. If you have questions regarding this report, please contact Mr. Edward Creef at (504)862-2521.

Sincerely,

Linda G. Mathies  
Chief, Environmental Function

Enclosure

Project Report  
**ENDANGERED SPECIES MONITORING**  
Calcasieu River and Pass, LA  
Bar Channel  
Maintenance Dredging  
99-5-CAL

Operations Technical Support Branch  
US Army Corps of Engineers  
New Orleans District  
504-862-2504

## **Introduction**

This report is submitted to fulfill requirements of the Endangered Species Act and the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The New Orleans District (NOD) submits this preliminary report summarizing the results of Fiscal Year (FY) 1999 maintenance dredging of the Calcasieu River and Pass, Louisiana, bar channel by the Contract Dredge ATCHAFALAYA.

The NOD scheduled dredging in the Calcasieu River and Pass, Louisiana bar channel, such that the majority of the maintenance work would be conducted between December 1 and March 30, the time period when sea turtles are predicted to be the least abundant in nearshore gulf waters. However, the dredge that was awarded the contract for the FY 99 work, the ATCHAFALAYA, is a small size hopper dredge. Historically medium size hopper dredges have conducted Calcasieu River and Pass, La., bar channel maintenance. A medium hopper dredge has higher production than a small size hopper dredge. The ATCHAFALAYA required more time to complete channel maintenance and some work was conducted after March 30. Completely avoiding dredging during the period when sea turtles are abundant in the nearshore gulf waters was not possible during this maintenance event because the time period required to complete this work was longer than anticipated.

## **Scope of Work**

Maintenance dredging of the Calcasieu River and Pass, LA., bar channel was conducted under contract DACW29-99-0002. The ATCHAFALAYA began work on November 15, 199~~8~~. The ATCHAFALAYA conducted dredging between approximate channel Miles -1.7 and -32.0. The majority of the dredged material was removed from between Miles -1.7 and -19.2.

Maintenance dredging activities were conducted during the time period when sea turtle monitoring was required as described in the ITS. The results of monitoring are summarized in Table 1.

In 1995, and previous years, the National Marine Fisheries Service determined that listed whales are unlikely to be adversely affected by hopper dredging in the Gulf of Mexico. As a result, endangered species monitors for whales, bridge observers, were not required for this contract. Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4. and 6. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

## **Methodology**

The dredge worked in dredge and haul and agitation modes. Material was deposited in the Ocean Dredged Material Disposal Site located south of and parallel to the navigation channel (Figure 1). The ATCHAFALAYA was equipped with 4"x 4" inflow screens and sea turtle observers were on board monitoring for sea turtle takes. The screens were inspected for sea

turtles and sea turtle parts and cleared by hand of debris. Draghead deflectors are not currently required for this project and were not in use during dredging operations.

## **Results**

The ATCHAFALAYA worked from November 15, 1998, to May 28, 1999. Approximately 155,000 cubic yards of shoal material was removed by dredge and haul operations. Approximately 5,500,000 cubic yards of shoal material were removed in the agitation mode.

During this maintenance event there were no documented sightings or takes of sea turtles.

Throughout the dredging work both biological and non-biological debris was recovered from the screens. The majority of the non-biological debris consisted of plastics, cloth, and assorted fishing-associated gear. The biological material collected included unspecified grasses, sea grass, moonsnails, pensnails, worms, eels, bivalves, blue crabs, spider crabs, shrimp, scallops, jellyfish, catfish, and redfish. The results of the screen monitoring are summarized in table 1.

Water temperatures ranged from a maximum surface water temperature of 83 degrees F (28.3 degrees C) to a minimum surface water temperature of 64.4 degrees F (18 degrees C). Mid-depth water temperatures ranged from a maximum of 80 degrees F (26.7 degrees C) to a minimum of 64.4 degrees F (18 degrees C).

Bridge monitoring was conducted opportunistically.

## **Discussion**

No turtle takes or sightings were recorded during this dredging event. Temperature conditions during the maintenance event were well within range of sea turtle tolerances. Old dolphin bones were recovered in the screens on November 18 and 20, 1998 and on May 9, 10, 12, and 16, 1999. An old pilot whale lower left dentary was recovered in the screens on November 18, 1998.

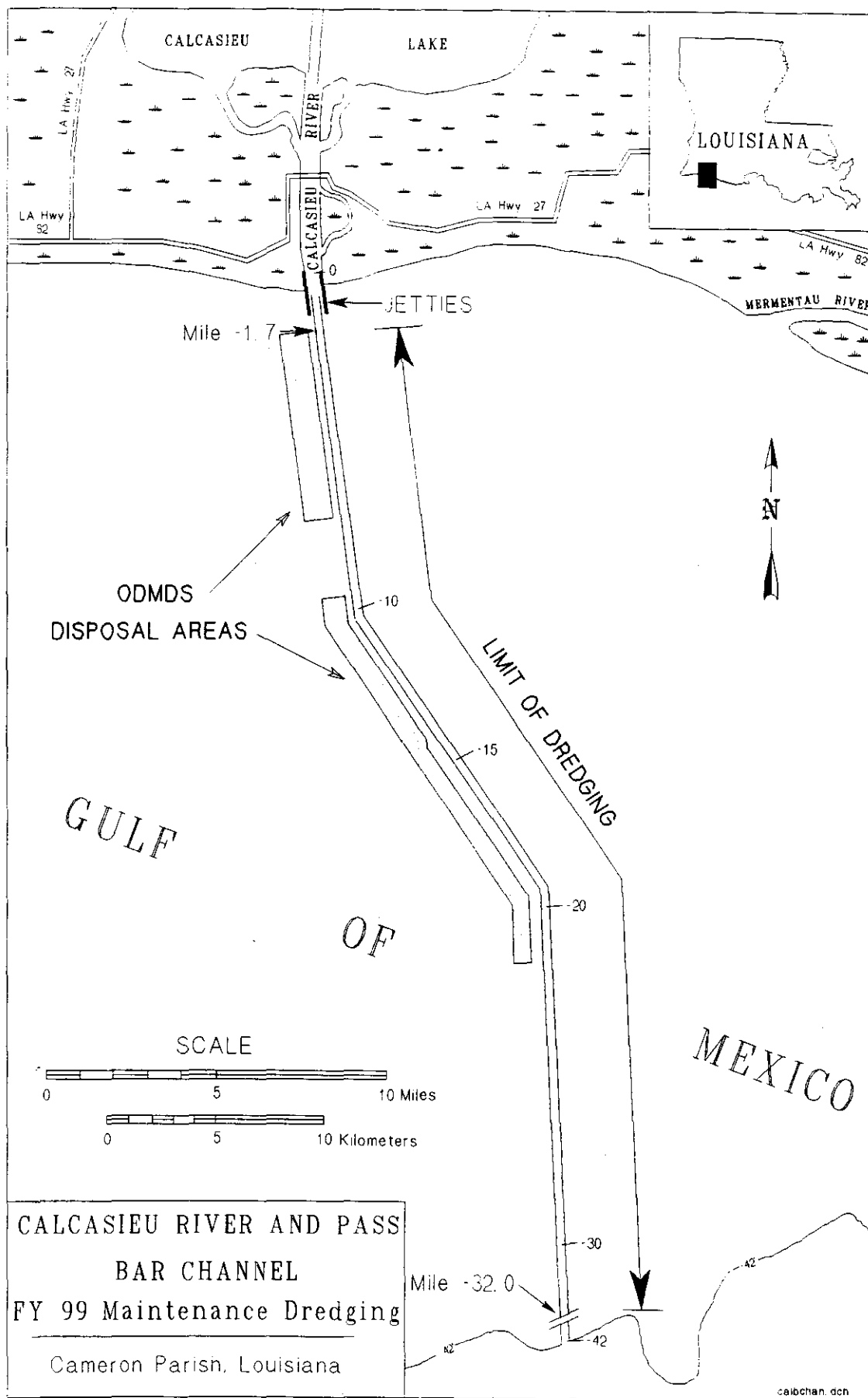


Figure 1

Table 1. Summary Sea Turtle Observer Reports ATCHAFALAYA

DATE	DREDGE	NOTES
16 NOV 1998	ATCHAFALAYA	Screens: Blue crab, knobbed whelks, assorted trash Below Mid-Depth Temp: No Data Surface Temp: No Data Weather: overcast Other: first day of work
17 NOV 1998	ATCHAFALAYA	Screens: whelk, sea weed, assorted trash Below Mid-Depth Temp: 68.9 C Surface Temp: 67-70 F Weather: Overcast, hazy Other: Dredge anchored in afternoon for pump repair
18 NOV 1998	ATCHAFALAYA	Screens: whelk egg cases, bivalve and gastropod shells, blue crabs, majority of material trash, Below Mid-Depth Temp: 68.9-71.6 F Surface Temp: 66.2-68 F Weather: Overcast, winds to 12 knots Other: Old pilot whale jawbone & dolphin vertebrae found in screens
19 NOV 1998	ATCHAFALAYA	Screens: sea grass, oyster, snail, clam shells, trash Below Mid-Depth Temp: 69.8-71.6 F Surface Temp: 66.2 F Weather: Clear, winds to 10 knots Other:
20 NOV 1998	ATCHAFALAYA	Screens: whelk eggs, moonsnails, blue crab, and assorted trash Below Mid-Depth Temp: 69.8-71.6 F Surface Temp: 66.2-68.9 F Weather: Foggy, winds 10-30 knots Other: Old dolphin vertebrae in screens, rough seas in afternoon halted dredging

21 NOV 1998	ATCHAFALAYA	Screens: catfish, flatfish, blue crab, whelk egg cases, assorted trash Below Mid-Depth Temp: 68.9 F Surface Temp: 67.1 F Weather: Overcast, winds 18-25 knots Other:
22 NOV 1998	ATCHAFALAYA	Screens: catfish, blue crab, mantid shrimp, worms, eels, assorted trash Below Mid-Depth Temp: 69.8-71.6 F Surface Temp: 66.2-68.9 F Weather: Cloudy, Winds 5-20 knots Other:
23 NOV 1998	ATCHAFALAYA	Screens: Oyster shells, whelk egg cases, assorted trash, monofilament line Below Mid-Depth Temp: 67.1-71.6 F Surface Temp: 64.4-68 F Weather: seas 1-2 feet, winds 5-10 knots SW Other:
24 NOV 1998	ATCHAFALAYA	Screens: whelk egg cases, oyster shells, snails, plastic, cloth, rope Below Mid-Depth Temp: 67.1-69.8 F Surface Temp: 66.2-67.1 F Weather: Overcast, fog, wind 5-8 knots Other:
25 NOV 1998	ATCHAFALAYA	Screens: sea grass, bivalve and gastropod shells, trash Below Mid-Depth Temp: 71.6 F Surface Temp: 71.6 F Weather: Hazy to clear, winds 10-15 knots Other:

26 NOV 1998	ATCHAFALAYA	Screens: sea grass, whelk eggs, moonsnails, trash Below Mid-Depth Temp: 74.3 F Surface Temp: 73.4 F Weather: Foggy, winds 5 knots Other: Rough seas in afternoon halted dredging
27 NOV 1998	ATCHAFALAYA	Screens: sea grass, assorted trash Below Mid-Depth Temp: No data Surface Temp: No data Weather: Heavy fog, wind 5 knots SW Other:
28 NOV 1998	ATCHAFALAYA	Screens: oysters, blue crab, sea grass, moon snails, assorted trash, wood Below Mid-Depth Temp: No data Surface Temp: No data Weather: Foggy, winds 10-20 knots Other:
29 NOV 1998	ATCHAFALAYA	Screens: Oyster shells, whelk egg cases, assorted trash, monofilament line Below Mid-Depth Temp: No data Surface Temp: No data Weather: Seas 2-3 feet, overcast, winds 5-15 knots Other:
30 NOV 1998	ATCHAFALAYA	Screens: whelk egg cases, oyster shells, snails, sea grass, plastic, cloth, rope, trash Below Mid-Depth Temp: ND Surface Temp: No data Weather: Clear, wind 15 knots SSE Other:
1 DEC 1998 TO 30 MAR 1999	ATCHAFALAYA	Screens:., Below Surface Temp: Other: NO OBSERVORS NECESSARY



1 APRIL 1999	ATCHAFALAYA	Screens: Oyster shells, whelk egg cases, assorted trash, monofilament line Below Mid-Depth Temp: 66 F Surface Temp: 66 F Weather: seas 2-3 feet, winds 5-20 knots SE Other:
2 APRIL 1999	ATCHAFALAYA	Screens: whelk egg cases, oyster shells, snails, plastic, cloth, rope Below Mid-Depth Temp: ND Surface Temp: 67-70 F Weather: Overcast, fog, wind 18-20 knots Other:
3 APRIL 1999	ATCHAFALAYA	Screens: whelk egg cases, bivalve and gastropod shells, blue crabs, majority of material trash, Below Mid-Depth Temp: ND Surface Temp: 69.8 F Weather: Winds to 30 knots Other:
4 APRIL 1999	ATCHAFALAYA	Screens: whelk eggs, moonsnails, blue crab, and assorted trash Below Mid-Depth Temp: No data Surface Temp: 69F Weather: Overcast, Winds 15-35 knots Other: Rough seas in afternoon halted dredging
5 APRIL 1999	ATCHAFALAYA	Screens: catfish, flatfish, blue crab, whelk egg cases, assorted trash Below Mid-Depth Temp: No data Surface Temp: 71.6 F Weather: Winds 5-25 knots Other:

6 APRIL 1999	ATCHAFALAYA	Screens: catfish, blue crab, mantid shrimp, worms, eels, assorted trash Below Mid-Depth Temp: No data Surface Temp: 70-71 F Weather: Cloudy, Winds 5-20 knots Other:
7 APRIL 1999	ATCHAFALAYA	Screens: catfish, penshell, eel, worms, blue crabs, assorted trash Below Mid-Depth Temp: No data Surface Temp: 71.6-73.4 F Weather: Winds 5-15 knots Other:
8 APRIL 1999	ATCHAFALAYA	Screens: crabs, catfish, worms, trash Below Mid-Depth Temp: No data Surface Temp: 69.8-71.6 F Weather: Winds 5-25 knots SSE Other:
9 APRIL 1999	ATCHAFALAYA	Screens: crabs, catfish, worms, assorted trash Below Mid-Depth Temp: No data Surface Temp: 71.6 F Weather: Winds 15-20 knots Other:
10 APRIL 1999	ATCHAFALAYA	Screens: blue crabs, catfish, snails, bivalves, worms, assorted trash Below Mid-Depth Temp: No data Surface Temp: 71.6 F Weather: Winds 5-15 knots SSE Other:

11 APRIL 1999	ATCHAFALAYA	Screens: penshells, worms, blue crab, whelk eggs, assorted trash Below Mid-Depth Temp: No data Surface Temp: 76-78 F Weather: Overcast to clear, Winds calm to 20 knots Other:
12 APRIL 1999	ATCHAFALAYA	Screens: catfish, blue crab, whelks, whelk egg cases, worms, scallops, algae, jellyfish, assorted trash Below Mid-Depth Temp: no data Surface Temp: 74-76 F Weather: Clear to Ptly cloudy, Winds calm to 20 knots Other:
13 APRIL 1999	ATCHAFALAYA	Screens: catfish, blue crab, whelk, shrimp, algae, assorted trash Below Mid-Depth Temp: No data Surface Temp: 73-74 F Weather: Clear, 3-4 foot seas Other: Dredge quit working 20:00 because of wind
14 APRIL 1999	ATCHAFALAYA	Screens: Below Mid-Depth Temp: Surface Temp: Weather: Clear, winds 25-30 knots Other: Dredge not working because of winds
15 APRIL 1999	ATCHAFALAYA	Screens: catfish, seagrass Below Mid-Depth Temp: No data Surface Temp: 74 F Weather: Clear, Winds 25-30 knots Other: Dredge resumed work 17:00

16 APRIL 1999	ATCHAFALAYA	Screens: blue crabs, whelks, whelk eggs, jellyfish, catfish, sea grass, assorted trash Below Mid-Depth Temp: No data Surface Temp: 74 F Weather: Clear to overcast, winds 15-35 knots Other:
17 APRIL 1999	ATCHAFALAYA	Screens: blue crabs, spider crab, catfish, whelks, whelk eggs, worms, assorted trash Below Mid-Depth Temp: no data Surface Temp: 74 F Weather: Clear, Winds 5-11 knots Other:
18 APRIL 1999	ATCHAFALAYA	Screens: catfish, lamellibranchs, gastropods, skate, whelk egg cases, assorted trash Below Mid-Depth Temp: No data Surface Temp: 69.8 F Weather: Winds 1-25 knots Other:
19 APRIL 1999	ATCHAFALAYA	Screens: catfish, whelk eggs, sea grass, blue crab, spider crab Below Mid-Depth Temp: No data Surface Temp: 73.4 F Weather: Winds 10-20 knots Other:
20 APRIL 1999	ATCHAFALAYA	Screens: catfish, whelk eggs, sea grass, blue crab, mollusks, assorted trash Below Mid-Depth Temp: No data Surface Temp: 71 F Weather: Winds 20-25 knots Other:

21 APRIL 1999	ATCHAFALAYA	Screens: catfish, sea grass, moon snails, penshells, blue crab, spider crab, whelk egg cases, assorted trash Below Mid-Depth Temp: No data Surface Temp: 71.6 F Weather: Overcast , Winds 25-30 knots Other:
22 APRIL 1999	ATCHAFALAYA	Screens: Below Mid-Depth Temp: Surface Temp: Weather: Other: Dredge at dock due to weather
23 APRIL 1999	ATCHAFALAYA	Screens: spider crabs, blue crabs Below Mid-Depth Temp: no data Surface Temp: 71.6 F Weather: Winds 15-25 knots Other:
24 APRIL 1999	ATCHAFALAYA	Screens: spider crabs, blue crabs, gastropods, lamellibanchs, whelk egg cases, worms, catfish, assorted trash Below Mid-Depth Temp: No data Surface Temp: 64.4-66.2 F Weather: Hazy, Winds 5-15 knots Other:
25 APRIL 1999	ATCHAFALAYA	Screens: catfish, spider crab, worms, jellyfish, penshell, moon snail, whelk egg, assorted trash Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: Clear, Winds 5-10 knots Other:

26 APRIL 1999	ATCHAFALAYA	Screens: worms, catfish, whelks, whelk egg cases, sea grass, spider crabs, assorted trash Below Mid-Depth Temp: No data Surface Temp: 74 F Weather: Overcast, thunderstorms Other:
27 APRIL 1999	ATCHAFALAYA	Screens: blue crab, mackerel, penshells, sea grass, whelk, whelk egg cases, assorted trash Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: Clear to overcast , Winds 5-25 knots Other: Shrimp boat trawling in area
28 APRIL 1999	ATCHAFALAYA	Screens: catfish, whelk egg cases, sea grass, assorted trash Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: Clear to ptly cloudy, Winds 0-5 knots Other:
29 APRIL 1999	ATCHAFALAYA	Screens: catfish, whelk, whelk egg cases, worms, sea grass, trash Below Mid-Depth Temp: no data Surface Temp: 76 F Weather: Clear, Winds 0-5 knots Other: Shrimp boat observed working nearby
30 APRIL 1999	ATCHAFALAYA	Screens: catfish, trash Below Mid-Depth Temp: No data Surface Temp: 76-77 F Weather: Clear, Winds 10-30 knots Other:

1 MAY 1999	ATCHAFALAYA	Screens: no biological specimens, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 75-76 F Weather: Clear, winds 5-20 knots Other:
2 MAY 1999	ATCHAFALAYA	Screens: shrimp, fish parts, gastropods, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 75-76 F Weather: Clear ptly cloudy, winds 10-20 knots Other:
3 MAY 1999	ATCHAFALAYA	Screens: blue crab, shrimp, catfish, seaweed, assorted trash Below Mid-Depth Temp: 75-75.5 F Surface Temp: 75-75.5 F Weather: Cloudy, winds 18-20 knots Other:
4 MAY 1999	ATCHAFALAYA	Screens: catfish, seaweed, assorted trash Below Mid-Depth Temp: 75 F Surface Temp: 75 F Weather: Cloudy, winds 18-24 knots Other:
5 MAY 1999	ATCHAFALAYA	Screens: sargassum, whelk egg cases, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 77-78F Weather: Sunny, hazy Other: Dredge was not working in morning

6 MAY 1999	ATCHAFALAYA	Screens: mantis shrimp, blue crabs, catfish, worms, clams, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 77 F Weather: Sunny clear-foggy, winds 10 knots Other:
7 MAY 1999	ATCHAFALAYA	Screens: sea grass, whelk egg cases, clams, cockle shells, mantis shrimp, assorted trash including a 12 gauge shotgun Below Mid-Depth Temp: 74 F Surface Temp: 76-77 F Weather: Sunny, clear Other:
8 May 1999	ATCHAFALAYA	Screens: crabs, oysters, cockles, clams, worms, jellyfish, assorted trash Below Mid-Depth Temp: No data Surface Temp: 78 F Weather: Clear, winds 8 knots Other:
9 May 1999	ATCHAFALAYA	Screens: algae, whelks, oysters, seaweed, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 77 F Weather: Cloudy , winds 8-20 knots Other: Dolphin scapula determined old bone
10 May 1999	ATCHAFALAYA	Screens: algae, whelk, seaweed Below Mid-Depth Temp: 76 F Surface Temp: 77 F Weather: Overcast, rainy, winds 15-40 knots Other: Dolphin scapula determined old bone, dredging stopped twice due to heavy weather



11 May 1999	ATCHAFALAYA	Screens: oyster, whelk egg cases, whelks, plant material, assorted trash Below Mid-Depth Temp: no data Surface Temp: 77 F Weather: Scattered showers, winds 15-45 knots Other:
12 May 1999	ATCHAFALAYA	Screens: jellyfish, whelks, vegetation, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 77 F Weather: Sunny to showers Other: Old dolphin bones recovered
13 May 1999	ATCHAFALAYA	Screens: seaweed, jellyfish, gastropods, oysters, crabs, whelk egg casing, blue crabs, vegetation, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 77 F Weather: Sunny, clear, winds 0-5 knots Other:
14 May 1999	ATCHAFALAYA	Screens: whelk egg casings, oysters, gastropods, vegetation, assorted trash Below Mid-Depth Temp: 78 F Surface Temp: 79 F Weather: Overcast to sunny, winds 0-15 knots Other:
15 May 1999	ATCHAFALAYA	Screens: gastropods, jellyfish, whelk egg casings, seaweed, assorted trash Below Mid-Depth Temp: 78 F Surface Temp: 80 F Weather: Clear to overcast , winds 20 knots Other:

16 May 1999	ATCHAFALAYA	Screens: blue crabs, whelk egg casings, fish bones, roots, seaweed, oyster shells, gastropods, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 80 F Weather: Overcast, winds 10-15 knots Other: Old dolphin bones found in screens
17 May 1999	ATCHAFALAYA	Screens: blue crabs, whelk egg cases, lamellibranch and gastropod shells, assorted trash Below Mid-Depth Temp: 76 F Surface Temp: 80 F Weather: Partly cloudy, winds 10-20 knots Other:
18 May 1999	ATCHAFALAYA	Screens: whelk egg cases, gastropod, lamellibranch shells, sting ray, seaweed Below Mid-Depth Temp: 77 F Surface Temp: 79-82 F Weather: Rain to clear, winds variable Other:
19 May 1999	ATCHAFALAYA	Screens: blue crabs, whelk egg casings, sea grass, gastropod and lamellibranch shell fragments, flatfish, assorted trash Below Mid-Depth Temp: 75-78 F Surface Temp: 75-82 F Weather: Cloudy to clear, winds 0-10 knots Other:
20 May 1999	ATCHAFALAYA	Screens: catfish, sea pens, blue crab, shells, sea grass, assorted trash Below Mid-Depth Temp: 78-80 F Surface Temp: 79-82 F Weather: Winds calm to 20 knots Other:

21 May 1999	ATCHAFALAYA	Screens: pen shells, blue crab, spider crab, catfish, whelk egg casings, bivalve, shell fragments, sea grass. Below Mid-Depth Temp: 76 F Surface Temp: 76-82 F Weather: Winds 10 knots Other:
22 May 1999	ATCHAFALAYA	Screens: pen shells, moon snails, burrowing annelid worms, sea grass, assorted trash Below Mid-Depth Temp: 76-77 F Surface Temp: 76-82 F Weather: Light winds Other:
23 May 1999	ATCHAFALAYA	Screens: clupeiid fish, moon snails, burrowing annelid worms, pen shells, sea grass, fragmented lamellibranch and gastropod shells, assorted trash Below Mid-Depth Temp: 77-78 F Surface Temp: 78-83.5 F Weather: Winds 5-20 knots Other:
24 May 1999	ATCHAFALAYA	Screens: whelk, whelk egg casings, blue crab, mulluscan shell fragments, assorted trash Below Mid-Depth Temp: 76-78 F Surface Temp: 78-83 F Weather: Winds 6-20 knots Other:
25 May 1999	ATCHAFALAYA	Screens: eel, catfish skull, moon snail, shell fragments Below Mid-Depth Temp: 76-78 F Surface Temp: 76-83 F Weather: Winds calm to 20 knots Other:

26 May 1999	ATCHAFALAYA	Screens: shell fragments, sea grass Below Mid-Depth Temp: 76-79 F Surface Temp: 76-82 F Weather: Winds 15-20 knots, storms Other:
27 May 1999	ATCHAFALAYA	Screens: whelk egg casing, shell fragments, sea grass, trash Below Mid-Depth Temp: 76-77 F Surface Temp: 82 F Weather: Variable winds 0-10 knots Other:
28 May 1999	ATCHAFALAYA	Screens: shrimp, blue crabs, whelk egg casings, sea weed, assorted debris Below Mid-Depth Temp: 76-77 F Surface Temp: 77-80 F Weather: Other: Contract ended 1545 hrs